

Section 712—Fiberglass Blanket

712.1 General Description

This work includes furnishing and placing fiberglass blankets over previously prepared and grassed areas according to the Plans or as directed by the Engineer.

712.1.01 Definitions

General Provisions 101 through 150.

712.1.02 Related References

A. Standard Specifications

Section 106—Control of Materials

Section 700—Grassing

Section 822—Emulsified Asphalt

B. Referenced Documents

General Provisions 101 through 150.

712.1.03 Submittals

Submit certification according to Subsection 106.05 stating that materials conform to the requirements of this Section.

712.2 Materials

A. Fiberglass Mat or Blanket

Fiberglass mat is a machine-produced blanket consisting of a uniform layer of continuous, randomly oriented glass fiber strands. Use a mat that is at least 48 in (1.2 m) wide and weighs the following:

- At least 0.2 lbs/yd² (105 g/m²) when used on slopes
- At least 0.4 lbs/yd² (215 g/m²) when used in waterways

B. Anchoring Staples

Use staples made of cold-drawn wire no smaller than 14 gauge (2 mm) in diameter, formed into a U shape with 6 in (150 mm) long legs and a 1 in (25 mm) wide crown.

C. Asphalt

Use asphalt emulsion for tying down the blanket that is grade SS-1h or SS1, conforming to Section 822.

712.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

712.3 Construction Requirements

712.3.01 Personnel

General Provisions 101 through 150.

712.3.02 Equipment

General Provisions 101 through 150.

712.3.03 Preparation

Before placing the fiberglass mat, complete grassing, smooth the area, and clear it of stones, lumps, roots, or other material that would prevent the mat from laying snugly on the underlying soil.

712.3.04 Fabrication

General Provisions 101 through 150.

712.3.05 Construction

A. Placing Mat

Place the fiberglass mat or blanket within 24 hours after the area has been planted but before any rain or watering. Place the mat as follows:

1. Dig a 9 in (225 mm) deep anchor slot across the upgrade end of the site.
2. Place the initial 12 in (300 mm) of blanket in the anchor slot.
3. Backfill and solidly tamp the slot.
4. Unroll the blanket in the direction of water flow, keeping the blanket in contact with the soil over the entire area.
5. Overlap adjacent strips at least 2 in (50 mm). Overlap adjoining ends at least 6 in (150 mm) with the upstream section on top.

B. Stapling

Drive staples vertically into the ground approximately 1 yd (1 m) apart on each side of the blanket.

Drive one row in the center alternately spaced between each side staple.

Place the edge staples in the 2 in (50 mm) overlap. At the end of each mat, place staples in a row spaced approximately 12 in (300 mm) apart.

C. Steep Slopes

The Engineer may specify additional staples or check slots in waterways where slopes are steep or large water volumes or velocities are anticipated.

D. Asphalt Emulsion

The Contractor may apply an asphalt emulsion instead of staples to anchor the blanket.

Apply the bituminous material uniformly over the mat at approximately the following rates:

- 0.12 gal to 0.15 gal/yd² (0.5 L to 0.7 L/m²) for slopes
- 0.24 gal to 0.30 gal/yd² (1 L to 1.4 L/m²) or waterways

After the emulsified asphalt has broken and becomes tacky, apply a light layer of sand or pulverized soil to the treated areas, if directed by the Engineer. This application prevents the treated area from sticking to anything that contacts it. Do not apply sand or soil in quantities that would damage the newly planted areas.

712.3.06 Quality Acceptance

General Provisions 101 through 150.

712.3.07 Contractor Warranty and Maintenance

Maintain treated areas to the Engineer's satisfaction until Final Acceptance.

712.4 Measurement

The quantity of fiberglass blanket being paid for is the number of square yards (meters), surface measured, completed and accepted. The 2 in (50 mm) side laps and the blanket in the anchor slot are not included in the measurement, but are considered incidental to the work. Treated slopes and treated waterways are measured separately.

712.4.01 Limits

General Provisions 101 through 150.

712.5 Payment

This work will be paid for at the Contract Price per square yard (meter) for fiberglass blanket, complete in place and accepted. Payment is full compensation for furnishing and installing the blanket according to this Specification and maintaining the blanket. Preparing the area and grassing will be paid for according to Section 700.

Payment will be made under:

Item No. 712	Fiberglass blanket, (slopes)	Per square yard (meter)
Item No. 712	Fiberglass blanket, (waterways)	Per square yard (meter)

712.5.01 Adjustments

General Provisions 101 through 150.

Section 713—Organic And Synthetic Material Fiber Blanket

713.1 General Description

This work includes furnishing and placing straw, excelsior, coconut fiber, wood fiber, or synthetic blankets over previously prepared and permanently grassed areas as shown on the Plans or as directed by the Engineer.

713.1.01 Definitions

- Straw Blanket: A machine-produced blanket of clean, weed-free, consistently thick straw from agricultural crops. The straw is evenly distributed over the entire area of the blanket.
- Excelsior Blanket: A machine-produced mat of curled wood excelsior. Eighty percent consists of 6 in (150 mm) or longer fiber evenly distributed over the entire blanket.
- Coconut Fiber Blanket: A machine-produced blanket of 100 percent coconut fiber evenly distributed over the entire blanket.
- Wood Fiber Blanket:
 - Type I—A machine-produced blanket manufactured with reprocessed wood fibers to a consistent thickness.
 - Type II—A hydraulically applied bonded fiber matrix which upon drying, adheres to the soil in the form of a continuous 100 percent coverage, biodegradable erosion control blanket
- Synthetic Fiber Blanket—A machine produced uniform blanket of ultraviolet degradable polypropylene staple fibers reinforced with ultraviolet degradable polypropylene netting.

713.1.02 Related References**A. Standard Specifications**

General Provisions 101 through 150.

B. Referenced Documents

General Provisions 101 through 150.

713.1.03 Submittals

Use approved materials from QPL 62 without further testing. Otherwise, submit materials for testing before use.

713.2 Materials

Use blankets that meet the following requirements for placement on slopes and waterways. For a list of organic material fiber blankets, see QPL 62.

A. Straw Blanket

Use blankets at least 48 in (1.2 m) wide and at least 3/8 in (9 mm) thick with a minimum dry weight of 0.5 lb/yd² (270 g/m²) and a stitch pattern and row spacing of no more than 2 in (50 mm). Have the top side covered with a photo-degradable plastic mesh having a maximum mesh size of 5/16 by 5/16 in (8 mm by 8 mm). The mesh will be sewn to the straw with biodegradable thread.

Use this blanket on slopes only.

B. Excelsior Blanket

Use a smolder-resistant blanket with the top side clearly marked. Use a blanket at least 48 in (1.2 m) wide and 1/4 in (6 mm) thick with a minimum dry weight of 0.8 lb/yd² (430 g/m²) and a stitch pattern and row spacing of no more than 2 in (50 mm).

- Slopes: Have the top side covered with a photo-degradable plastic mesh having a maximum mesh size of 1-1/2 by 3 in (38 by 75 mm).